

## Pump Performance Datasheet

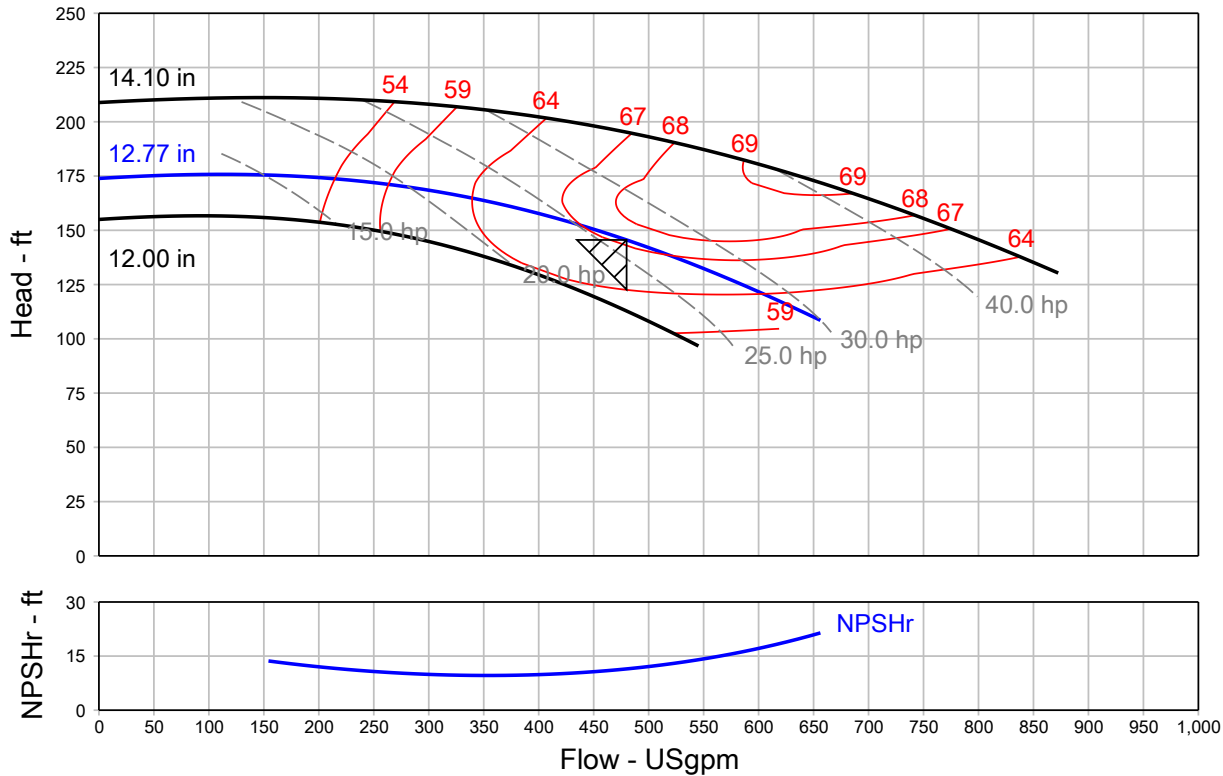
Customer :	Quote Number / ID :	1471203
Customer ref. / PO :	Model :	40159 VLS
Tag Number : 001	Stages :	1
Service :	Based on curve number :	VLS_40159_4P Rev May22
Quantity : 1	Basic model number :	-
	Date last saved :	01/20/2023 1:45 AM

Operating Conditions	Liquid
Flow, rated : 479.9 USgpm	Liquid type : Cold Water
Differential head / pressure, rated (requested) : 145.6 ft	Additional liquid description :
Differential head / pressure, rated (actual) : 145.6 ft	Solids diameter, max : 0.00 in
Suction pressure, rated / max : 0.00 / 0.00 psi.g	Solids concentration, by volume : 0.00 %
NPSH available, rated : Ample	Temperature, max : 68.00 deg F
Site Supply Frequency : 60 Hz	Fluid density, rated / max : 1.000 / 1.000 SG
	Viscosity, rated : 1.00 cP
	Vapor pressure, rated : 0.34 psi.a

Performance	Material
Speed, rated : 1780 rpm	Material selected : Ductile iron
Impeller diameter, rated : 12.77 in	
Impeller diameter, maximum : 14.10 in	
Impeller diameter, minimum : 12.00 in	
Efficiency : 67.28 %	
NPSH required / margin required : 11.44 / 0.00 ft	
nq (imp. eye flow) / S (imp. eye flow) : 18 / 92 Metric units	
MCSF : 139.7 USgpm	
Head, maximum, rated diameter : 175.8 ft	
Head rise to shutoff : 19.46 %	
Flow, best eff. point : 479.9 USgpm	
Flow ratio, rated / BEP : 100.00 %	
Diameter ratio (rated / max) : 90.57 %	
Head ratio (rated dia / max dia) : 74.57 %	
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010] : 1.00 / 1.00 / 1.00 / 1.00	
Selection status : Acceptable	

Energy Indexes	Pressure Data
PEI (CL) : 1.00	Maximum working pressure : 76.08 psi.g
ER (CL) : 0	Maximum allowable working pressure : 400.0 psi.g
	Maximum allowable suction pressure : 400.0 psi.g
	Hydrostatic test pressure : 600.0 psi.g

Driver & Power Data (@Max density)
Motor sizing specification : Max power (non-overloading)
Margin over specification : 0.00 %
Service factor : 1.00
Power, hydraulic : 17.64 hp
Rated power (based on duty point) : 26.21 hp
Max power (non-overloading) : 29.98 hp
Nameplate motor rating : 30.00 hp / 22.37 kW



## Grundfos Series VLS - In-Line Centrifugal Pump, Split Coupled

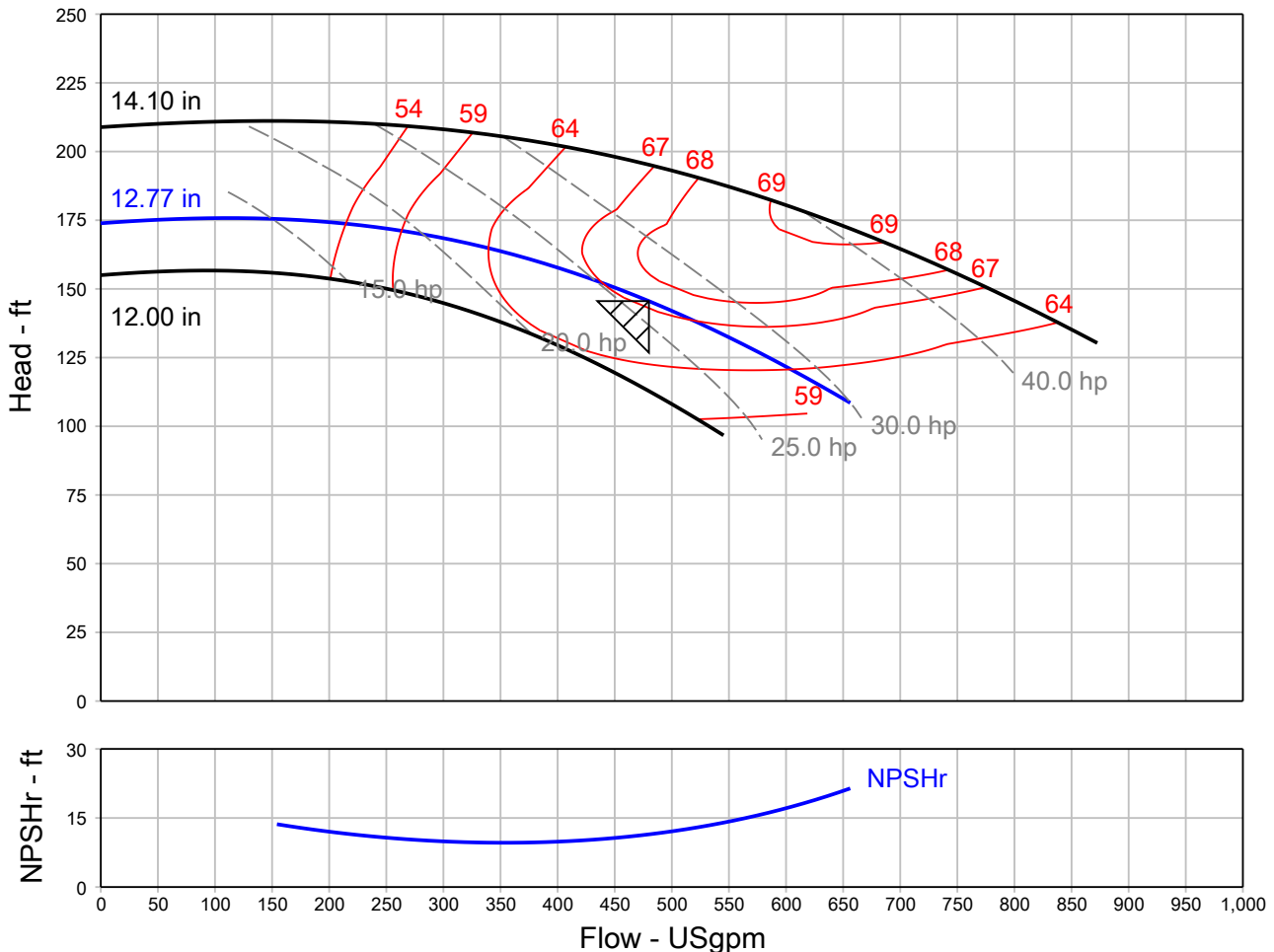
QUOTE NUMBER / ID 1471203	UNIT TAG 001	QUANTITY 1
REPRESENTATIVE	SERVICE	
ENGINEER	SUBMITTED BY	DATE
CONTRACTOR	APPROVED BY	DATE
	ORDER #	DATE



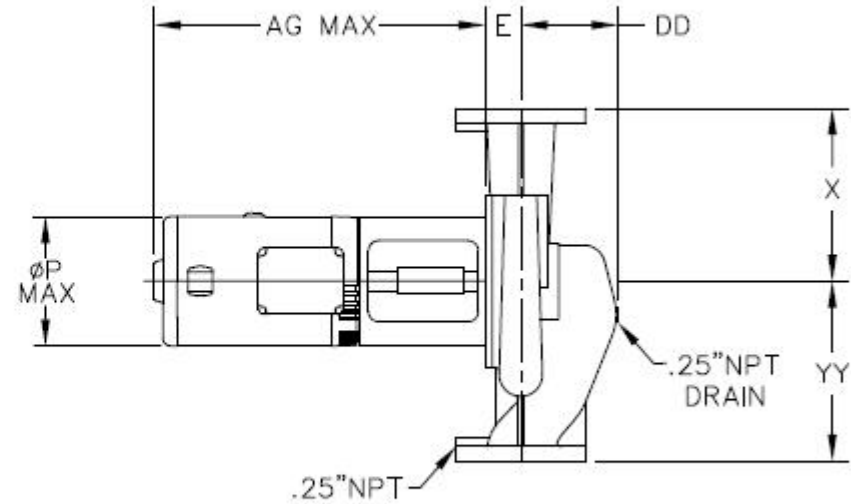
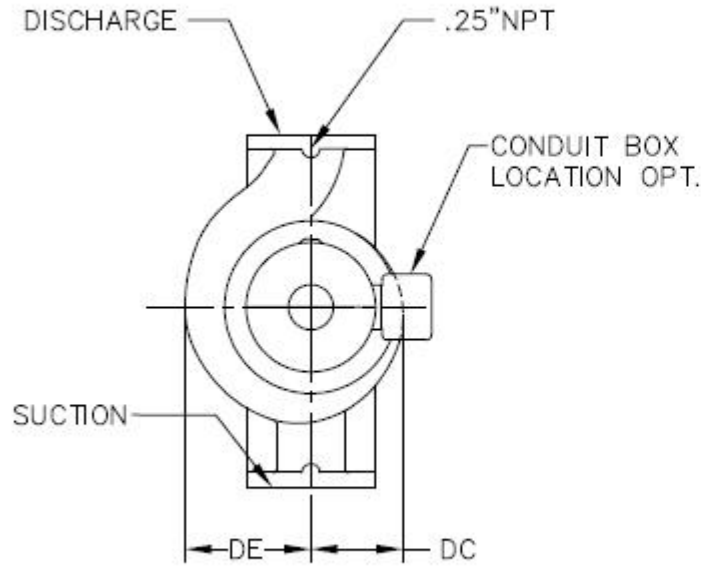
**VLS 40159**  
**1780 rpm**

Part Number N/A

Conditions of Service		Pump Data		Motor Data	
Flow	479.9 USgpm	Impeller Diameter	12.77 in	Motor HP	30 HP
Head	145.6 ft	Max. Imp. Dia.	14.10 in	BHP	26.21 HP
Liquid	Cold Water	Min. Imp. Dia.	12.00 in	Enclosure	TEFC
Temperature	68.00 deg F	Efficiency	67.28 %	Voltage	230/460 V
NPSHr	11.44 ft	Suction	4 in.	Phase	3 Phase
Viscosity	1.00 cP	Discharge	4 in.	Cycle	60
Specific Gravity	1.000 SG	PEI (CL)	1	Frame Size	286TC
		ER (CL)	0		



**Grundfos Series VLS - In-Line Centrifugal Pump, Split Coupled**



NOT FOR CONSTRUCTION, unless certified and referenced on order

Units	Frame	S x D	AG (Max)	DC	DD	DE	E	P (Max)	X	YY	Weight
inches	286TC	4 X 4	40.00	9.25	9.73	11.22	1.69	18.50	17.00	17.00	TBD